



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

**R E Lowell Lumber Co Inc
Oxford County
Buckfield, Maine
A-1000-71-B-A**

**Departmental
Findings of Fact and Order
Air Emission License
Amendment #1**

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. R E Lowell Lumber Co Inc (Lowell Lumber) was issued Air Emission License A-1000-71-A-N on January 30, 2009 permitting the operation of emission sources associated with their lumber mill.
2. The equipment addressed in this license is located at 132 North Hill Road, Buckfield, Maine.
3. Lowell Lumber has requested an amendment to their license in order to replace Boiler #1 with a new wood-fired boiler, Boiler #2.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (ton/hr)</u>	<u>Fuel Type</u>
Boiler #2	6.7	0.6	Wood at 35% moisture

Boiler #1 was destroyed in a fire. Boiler #2 is being installed as its replacement.

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04679-2094
(207) 764-0477 FAX: (207) 760-3143

C. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Levels" as defined in the Department's regulations. The emission increases are determined by subtracting the current licensed emissions preceding the modification from the maximum future licensed allowed emissions, as follows:

<u>Pollutant</u>	<u>Current License</u> <u>(TPY)</u>	<u>Future License</u> <u>(TPY)</u>	<u>Net Change</u> <u>(TPY)</u>	<u>Sig. Level</u>
PM	11.2	9.0	-2.2	100
PM ₁₀	11.2	9.0	-2.2	100
SO ₂	0.4	0.8	+0.4	100
NO _x	10.6	19.6	+9.0	100
CO	8.0	19.0	+11.0	100
VOC	4.9	5.2	+0.3	50

This modification is determined to be a minor modification and has been processed as such.

II. **BEST PRACTICAL TREATMENT (BPT)**

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Boiler #2

Boiler #2 is a new dutch oven boiler rated at 6.7 MMBtu/hr firing wood (35% moisture). Boiler #2 is equipped with multi-clones for control of PM emissions. The boiler is used to heat the facility's kilns.

Boiler #2 has a maximum heat input of 6.7 MMBtu/hr and is therefore not subject to the New Source Performance Standards (NSPS) Subpart Dc for steam generating units greater than 10 MMBtu/hr manufactured after June 9, 1989.

A summary of the BACT analysis for Boiler #2 is the following:

1. Lowell Lumber shall fire only clean, unpainted, untreated wood in Boiler #2.
2. Lowell Lumber shall continuously operate the multi-clone on Boiler #2 when Boiler #2 is in operation and maintain multi-clone drop points and associated equipment in good working order.
3. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103 (last amended November 3, 1990) regulates PM emission limits. The PM₁₀ limits are derived from the PM limits.
4. SO₂, NO_x, CO, and VOC emission limits are based upon AP-42 data dated 9/03.
5. Visible emissions from Boiler #2 shall not exceed 30% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

C. Annual Emissions

Lowell Lumber shall be restricted to the following annual emissions based on a calendar year:

Total Licensed Annual Emissions for the Facility

Tons/year

(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boiler #2	8.8	8.8	0.7	14.4	17.6	0.5
Generator #1	0.2	0.2	0.1	5.2	1.4	0.2
Kilns	--	--	--	--	--	4.5
Total TPY	9.0	9.0	0.8	19.6	19.0	5.2

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-1000-71-B-A subject to the conditions found in Air Emission License A-1000-71-A-N and in the following conditions.

The following shall replace Condition (16) of air emission license A-1000-71-A-N:

(16) Boiler #2

A. Boiler #2 shall fire only clean, unpainted, untreated wood.
[06-096 CMR 115, BACT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #2	PM	0.30	06-096 CMR 103

C. Emissions shall not exceed the following [06-096 CMR 115, BACT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #2	2.01	2.01	0.17	3.28	4.02	0.11

D. Lowell Lumber shall continuously operate the multi-clone on the emissions from Boiler #2 whenever Boiler #2 is in operation and maintain multi-clone drop points and associated equipment in good working order.
[06-096 CMR 115, BACT]

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- E. Visible emissions from Boiler #2 shall each not exceed 30% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

DONE AND DATED IN AUGUSTA, MAINE THIS 10th DAY OF February, 2010.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *James P. Burdette*
DAVID P. LITTELL, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-1000-71-A-N.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 12/15/09

Date of application acceptance: 1/7/10

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Ross, Bureau of Air Quality.

